<u>WHAT IS CLAIMED IS</u>:

1. A fluoropolymer-based tape comprising:

(a) a fluoropolymer;

(b) about 1 to about 6 percent by weight, based on the weight of the fluoropolymer, of virgin, unsintered, polyphenylene sulfide resin, wherein the polyphenylene sulfide resin has an average particle size of less than about 25 microns;

(c) about 1 to about 3 percent by weight, based on the weight of the fluoropolymer, of a poly-p-oxybenzoate.

2. The fluoropolymer-based tape of claim 1 further comprising between about one to about three percent by weight, based on the weight of the fluoropolymer, of a metal oxide.

3. The fluoropolymer-based tape of claim 1 wherein the metal oxide is a photosensitive metal oxide.

4. The fluoropolymer-based tape of claim 3 wherein the photosensitive metal oxide is selected from the group consisting of: titanium dioxide, zinc oxide and tin oxide.

5. The fluoropolymer-based tape of claim 1 wherein the polyphenylene sulfide resin has an average particle size of about 1 to about 20 microns.

6. The fluoropolymer-based tape of claim 5 wherein the polyphenylene sulfide resin has an average particle size of about 10 microns.

7. The fluoropolymer-based tape of claim 5 wherein the polyphenylene sulfide has a particle distribution size range of about 0.02 to about 60 microns.

8. The fluoropolymer-based tape of claim 7 wherein the polyphenylene sulfide has a particle distribution size range of about 0.75 to about 25 microns.

9. The fluoropolymer-based tape of claim 1 wherein the fluoropolymer is polytetrafluoroethylene.

10. A fluoropolymer-based tape of claim 1 which is sintered or unsintered.

11. A fluoropolymer-based tape comprising:

(a) a fluoropolymer;

(b) about 1 to about 6 percent by weight, based on the weight of the fluoropolymer, of virgin, unsintered, polyphenylene sulfide resin, wherein the polyphenylene sulfide resin has an average particle size of less than about 25 microns;

(c) from about 0 to about 3 percent by weight of a poly-p-oxybenzoate.

12. The fluoropolymer-based tape of claim 11 further comprising between about one to about three percent by weight, based on the weight of the fluoropolymer, of a metal oxide.

13. The fluoropolymer-based tape of claim 11 wherein the metal oxide is a photosensitive metal oxide.

14. The fluoropolymer-based tape of claim 13 wherein the photosensitive metal oxide is selected from the group consisting of: titanium dioxide, zinc oxide and tin oxide.

15. The fluoropolymer-based tape of claim 11 wherein the polyphenylene sulfide resin has an average particle size of about 1 to about 20 microns.

16. The fluoropolymer-based tape of claim 15 wherein the polyphenylene sulfide resin has an average particle size of about 10 microns.

17. The fluoropolymer-based tape of claim 15 wherein the polyphenylene sulfide has a particle distribution size range of about 0.02 to about 60 microns.

18. The fluoropolymer-based tape of claim 17 wherein the polyphenylene sulfide has a particle distribution size range of about 0.75 to about 25 microns.

19. The fluoropolymer-based tape of claim 11 wherein the fluoropolymer is polytetrafluoroethylene.

20. The fluoropolymer-based tape of claim 11 which is sintered or unsintered.

21. A method for producing a laser markable material useful for electrical cables and insulated conductors said process including the steps of:

(a) selecting a particulate polyphenylene sulfide having a mean particle size of about 1 to about 20 microns;

(b) selecting a particulate photosensitive material having a mean particle size less than 3 microns;

(c) mixing the particulate polyphenylene sulfide and photosensitive material with a fine powder paste extrudable polytetrafluoroethylene resin;

(d) air milling the mixture produced in step (c) to produce a uniform dispersion of said polyphenylene sulfide, said photosensitive material, and said polytetrafluoroethylene resin;

(e) blending the uniform dispersion produced in step (d) with an extrusion aid comprising a hydrocarbon solvent to produce a blend having a composition of about 2 to about 9 percent by weight, based on the weight of the polytetrafluoroethylene resin, of the photosensitive material, about 1 to about 6 percent by weight, based on the weight of the polytetrafluoroethylene resin, of said polyphenylene sulfide, about 8 to about 23% by weight, based on the weight of the polytetrafluoroethylene resin, extrusion aid, and the balance polytetrafluoroethylene resin;

(f) forming the blend of step (e) into a preform suitable for paste extrusion; and

(g) paste extruding said preform to produce a uniformly photosensitive material:polyphenylene sulfide filled polytetrafluoroethylene resin material having a selected configuration.

22. The method as recited in claim 21, wherein said photosensitive material is selected from the group consisting of TiO_2, SnO_2, and ZnO.

23. The method as recited in claim 22, wherein said photosensitive material is titanium dioxide having a rutile crystal structure with a purity greater than 90%.

24. The method as recited in claim 21, wherein said hydrocarbon solvent is selected from the group consisting of: light petroleum distillate, mineral oil, kerosene and naptha.

25. The method as recited in claim 21, wherein said selected configuration is selected from the group consisting of tapes and tubing.

26. The method as recited in claim 21, wherein said preform is paste extruded directly onto an electrical conductor.

27. The method as recited in claim 21, further comprising the step of sintering the material produced in step g.

28. The method as recited in claim 27, further including the step of exposing the sintered material to laser radiation to encode said material.

29. The material produced by the process of claim 21.

30. The material produced by the process of claim 23.

31. The material produced by the process of claim 25.

32. The material produced by the process of claim 26.

33. A method for producing a laser markable material useful for electrical cables and insulated conductors said process including the steps of:

(a) selecting a particulate polyphenylene sulfide having a mean particle size of about 1 to about 20 microns;

(b) selecting a particulate photosensitive material having a mean particle size greater than 3 microns;

(c) selecting poly-p-oxybenzoate;

(d) mixing the particulate polyphenylene sulfide and photosensitive material and poly-p-oxybenzoate with a fine powder paste extrudable polytetrafluoroethylene resin;

(e) air milling the mixture produced in step (d) to produce a uniform dispersion of said polyphenylene sulfide, said photosensitive material, and said polytetrafluoroethylene resin;

(f) blending the uniform dispersion produced in step (e) with an extrusion aid comprising a hydrocarbon solvent to produce a blend having a composition of about 2 to about 9 percent by weight, based on the weight of the polytetrafluoroethylene resin, of

the photosensitive material, about 1 to about 6 percent by weight, based on the weight of the polytetrafluoroethylene resin, of said polyphenylene sulfide, about 8 to about 23% by weight, based on the weight of the polytetrafluoroethylene resin, extrusion aid, from about 1 to about 3% poly-p-oxybenzoate, and the balance polytetrafluoroethylene resin;

(g) forming the blend of step (f) into a preform suitable for paste extrusion; and

(h) paste extruding said preform to produce a uniformly photosensitive material:polyphenylene sulfide filled polytetrafluoroethylene resin material having a selected configuration.

34. The method as recited in claim 33, wherein said photosensitive material is selected from the group consisting of TiO_2, SnO_2, and ZnO.

35. The method as recited in claim 33, wherein said photosensitive material is titanium dioxide having a rutile crystal structure with a purity greater than 90%.

36. The method as recited in claim 33, wherein said hydrocarbon solvent is selected from the group consisting of: light petroleum distillate, mineral oil, kerosene and naptha.

37. The method as recited in claim 33, wherein said selected configuration is selected from the group consisting of tapes and tubing.

38. The method as recited in claim 33, wherein said preform is paste extruded directly onto an electrical conductor.

39. The method as recited in claim 33, further comprising the step of sintering the material produced in step h.

40. The method as recited in claim 39, further including the step of exposing the sintered material to laser radiation to encode said material.

41. The material produced by the process of claim 33.

42. The material produced by the process of claim 34.

43. The material produced by the process of claim 39.

44. The material produced by the process of claim 40.